

ATTACHMENT A

Claims 1 - 11: (Cancelled)

12. (Original) A process for preparing cyclopentadienyl system anions of the formula (VII),

$$A \xrightarrow{R^{4B}} R^{1A}$$

$$R^{2A}$$

$$R^{3A}$$

$$R^{3A}$$

$$R^{4A}$$

where the variables have the following meanings: $R^{1A}-R^{4A}$ are each, independently of one another,

hydrogen, C_1 - C_{20} -alkyl, C_2 - C_{20} -alkenyl, C_6 - C_{20} -aryl, alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part, NR^{6A}_2 , $N(SiR^{6A}_3)_2$, OR^{6A} , $OSiR^{6A}_3$, SiR^{6A}_3 where the organic radicals R^{1A} - R^{4A} may also be substituted by halogens and two vicinal radicals R^{1A} - R^{4A} may also be joined to form a five- or sixmembered ring, and/or two vicinal radicals R^{1A} - R^{4A} are joined to form a heterocycle which contains at least one atom from the group consisting of N, P, O and S,

 R^{6A} are each, independently of one another, hydrogen, $C_1\text{-}C_{20}\text{-}alkyl,\ C_2\text{-}C_{20}\text{-}alkenyl,\ C_6\text{-}C_{20}\text{-}aryl,\ alkylaryl}$ having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part and two geminal radicals R^{6A} may also be joined to form a five- or six-membered ring,

A is an unsubstituted, substituted or fused, heteroaromatic ring system,

 R^{4B} are each, independently of one another, hydrogen, C_1 - C_{20} -alkyl, C_2 - C_{20} -alkenyl, C_6 - C_{20} -aryl, alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part or SiR^{3B}_3 , where the organic radicals R^{4B} may also be substituted by halogens and two geminal or vicinal radicals R^{4B} may also be joined to form a five- or six-membered ring and

 R^{3B} are each, independently of one another, hydrogen, C_1 - C_{20} -alkyl, C_2 - C_{20} -alkenyl, C_6 - C_{20} -aryl or alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part and two radicals R^{3B} may also be joined to form a five- or six-membered ring,

which comprises the step a) or a'), where, in step a), an A anion is reacted with a fulvene of the formula (VIIIa)

$$R^{4B}$$
 R^{4B}
 R^{4A}
 R^{3A}
 R^{4A}
 R^{4A}
 R^{4B}
 R^{4A}

or,

in step a'), an organometallic compound $R^{4B}M^BX^B_{\ b}$ where M^B is a metal of group 1 or 2 of the Periodic Table of the Elements,

 X^B is halogen, C_1 - C_{10} -alkyl, alkoxy having from 1 to 20 carbon atoms in the alkyl radical and/or from

6 to 20 carbon atoms in the aryl radical, or R^{2B} and

b is 0 when M^B is a metal of group 1 of the Periodic Table of the Elements and is 1

when $\ensuremath{\mathtt{M}}^{\ensuremath{\mathtt{B}}}$ is a metal of group 2 of the Periodic Table of the Elements,

is reacted with a fulvene of the formula (VIIIb):

$$R^{4B}$$
 R^{4A}
 R^{3A}
 R^{4A}
 R^{4A}
 R^{4A}
 R^{4A}

13. (Original) A process for preparing cyclopentadiene systems of the formula (VIIa)

$$R^{4B}$$
 R^{4B}
 R^{4A}
 R^{3A}
 R^{3A}

where the variables have the following meanings: $E^{6A}-E^{10A} \text{ are each carbon, where in each case four}$ $\text{adjacent } E^{6A}-E^{10A} \text{ form a conjugated diene system}$ and the remaining $E^{6A}-E^{10A} \text{ additionally bears a}$ hydrogen atom,

 $R^{1A}-R^{4A}$ are each, independently of one another, hydrogen, C_1-C_{20} -alkyl, C_2-C_{20} -alkenyl, C_6-C_{20} -aryl, alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part, NR^{6A}_2 , $N(SiR^{6A}_3)_2$, OR^{6A} , $OSiR^{6A}_3$, SiR^{6A}_3 , where the organic radicals $R^{1A}-R^{4A}$ may also be

substituted by halogens and two vicinal radicals $R^{1A}-R^{4A}$ may also be joined to form a five- or six-membered ring, and/or two vicinal radicals $R^{1A}-R^{4A}$ are joined to form a heterocycle which contains at least one atom from the group consisting of N, P, O and S,

- R^{6A} are each, independently of one another, hydrogen, C_1 - C_{20} -alkyl, C_2 - C_{20} -alkenyl, C_6 - C_{20} -aryl, alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part and two geminal radicals R^{6A} may also be joined to form a five- or six-membered ring,
- A is an unsubstituted, substituted or fused, heteroaromatic ring system,
- R^{2B} are each, independently of one another, hydrogen, C_1 - C_{20} -alkyl, C_2 - C_{20} -alkenyl, C_6 - C_{20} -aryl, alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part or SiR^{3B}_3 , where the organic radicals R^{2B} may also be substituted by halogens and R^{2B} and A may also be joined to form a five- or six-membered ring,
- R^{3B} are each, independently of one another, hydrogen, C_1 - C_{20} -alkyl, C_2 - C_{20} -alkenyl, C_6 - C_{20} -aryl or alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part and two radicals R^{3B} may also be joined to form a five- or six-membered ring,

which comprises the following step:

a'') reaction of an A-CR^{2B}R^{2B-} anion with a cyclopentenone system of the formula (IX)

$$Q = \begin{pmatrix} R^{1A} & & \\ & & \\ & & \\ R^{2A} & & \\ & & \\ R^{3A} & & \\ & & \\ R^{4A} & & \\ \end{pmatrix}$$
 (IX)

14. (New) A cyclopentadienyl system anion of the formula (VII),

$$A \xrightarrow{R^{4B}} R^{1A}$$

$$R^{2A}$$

$$R^{3A}$$

$$R^{3A}$$

wherein the variables have the following meanings: $R^{1A}-R^{4A}$ are each, independently of one another,

hydrogen, C_1 - C_{20} -alkyl, C_2 - C_{20} -alkenyl, C_6 - C_{20} -aryl, alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part, NR^{6A}_2 , $N(SiR^{6A}_3)_2$, OR^{6A} , $OSiR^{6A}_3$, SiR^{6A}_3 where the organic radicals R^{1A} - R^{4A} may also be substituted by halogens and two vicinal radicals R^{1A} - R^{4A} may also be joined to form a five- or sixmembered ring, and/or two vicinal radicals R^{1A} - R^{4A} are joined to form a heterocycle which contains at least one atom from the group consisting of N, P, O and S,

 R^{6A} are each, independently of one another, hydrogen, C_1 - C_{20} -alkyl, C_2 - C_{20} -alkenyl, C_6 - C_{20} -aryl, alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part and

two geminal radicals R^{6A} may also be joined to form a five- or six-membered ring,

- A is an unsubstituted, substituted or fused, heteroaromatic ring system,
- R^{4B} are each, independently of one another, hydrogen, C_1 - C_{20} -alkyl, C_2 - C_{20} -alkenyl, C_6 - C_{20} -aryl, alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part or SiR^{3B}_3 , where the organic radicals R^{4B} may also be substituted by halogens and two geminal or vicinal radicals R^{4B} may also be joined to form a five- or six-membered ring and
- R^{3B} are each, independently of one another, hydrogen, C_1 - C_{20} -alkyl, C_2 - C_{20} -alkenyl, C_6 - C_{20} -aryl or alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part and two radicals R^{3B} may also be joined to form a five- or six-membered ring.
- 15. (New) A cyclopentadiene system of the formula (VIIa)

$$R^{4B}$$
 R^{4B}
 R^{4A}
 R^{3A}
 R^{3A}

where the variables have the following meanings: $E^{6A}-E^{10A} \text{ are each carbon, where in each case four}$ $\text{adjacent } E^{6A}-E^{10A} \text{ form a conjugated diene system}$ and the remaining $E^{6A}-E^{10A} \text{ additionally bears a}$ hydrogen atom,

- $R^{1A}-R^{4A}$ are each, independently of one another, hydrogen, C_1-C_{20} -alkyl, C_2-C_{20} -alkenyl, C_6-C_{20} -aryl, alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part, NR^{6A}_2 , $N(SiR^{6A}_3)_2$, OR^{6A} , $OSiR^{6A}_3$, SiR^{6A}_3 , where the organic radicals $R^{1A}-R^{4A}$ may also be substituted by halogens and two vicinal radicals $R^{1A}-R^{4A}$ may also be joined to form a five- or sixmembered ring, and/or two vicinal radicals $R^{1A}-R^{4A}$ are joined to form a heterocycle which contains at least one atom from the group consisting of N, P, O and S,
- R^{6A} are each, independently of one another, hydrogen, C_1 - C_{20} -alkyl, C_2 - C_{20} -alkenyl, C_6 - C_{20} -aryl, alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part and two geminal radicals R^{6A} may also be joined to form a five- or six-membered ring,
- A is an unsubstituted, substituted or fused, heteroaromatic ring system,
- R^{2B} are each, independently of one another, hydrogen, C_1 - C_{20} -alkyl, C_2 - C_{20} -alkenyl, C_6 - C_{20} -aryl, alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part or SiR^{3B}_3 , where the organic radicals R^{2B} may also be substituted by halogens and R^{2B} and A may also be joined to form a five- or six-membered ring,
- R^{3B} are each, independently of one another, hydrogen, C_1 - C_{20} -alkyl, C_2 - C_{20} -alkenyl, C_6 - C_{20} -aryl or alkylaryl having from 1 to 10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part

and two radicals \mathbf{R}^{3B} may also be joined to form a five- or six-membered ring.